

IN THE CLAIMS:

All of the pending claims 1-7, 11-16, 20, and 21 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Currently Amended) A method for reducing the risk of scoring a false-positive test result when testing at least one sample obtained from a mammal for the presence or absence of an aberrant prion protein, the method comprising:
using said at least one sample to prepare a test set and a control set;
denaturing protein in said test set with guanidine thiocyanate or one or more chaotropic agents so
as to enhance antibody reactivity towards aberrant protein, while antibody reactivity
towards a normal form of the protein is reduced or ~~unchanged~~ unchanged;
leaving said control set untreated with guanidine thiocyanate or one or more chaotropic agents;
incubating said test set and said control set with anti-PrP^{Sc} antibodies;
probing said test set and said control set for the presence or absence of an aberrant prion protein;
and
~~comparing the result of said test set and said control set to look for~~ determining with said anti-
PrP^{Sc} antibodies instances of increased antibody reactivity as a function of denaturation in
guanidine thiocyanate or one or more chaotropic agents in the test set versus the control
set.
2. (Previously Presented) The method according to claim 1, wherein said method further comprises reducing the risk of scoring a false-negative test result by increasing the sensitivity of the test.
3. (Previously Presented) The method according to claim 1, wherein said at least one sample is tested in an immunoassay.

4. (Previously Presented) The method according to claim 3, wherein said immunoassay is designed for mass-screening purposes.

5. (Previously Presented) The method according to claim 1, further comprising treating said at least one sample with a protease to reduce the presence of normal prion protein.

6. (Previously Presented) The method according to claim 1, wherein said mammal is a ruminant.

7. (Previously Presented) The method according to claim 6, wherein said ruminant is ovine or bovine.

8-10. (Canceled).

11. (Previously Presented) The method according to claim 1, further comprising immunologically detecting said aberrant prion protein with at least one antibody directed against a proteinase K resistant part of the aberrant prion protein.

12. (Previously Presented) The method according to claim 11, wherein said at least one antibody is directed against a proteinase K resistant N-terminal part of the aberrant prion protein.

13. (Previously Presented) The method according to claim 11, wherein said at least one antibody is raised against an epitope from the aberrant prion protein.

14. (Previously Presented) The method according to claim 13, wherein said epitope has a sequence selected from the group consisting of SEQ ID NOS:7-30.

15. (Previously Presented) The method according to claim 11, wherein said aberrant prion protein is immunologically detected in an enzyme-linked immunoassay.

16. (Currently Amended) ~~The method according to claim 15,~~ A method for reducing the risk of scoring a false-positive test result when testing at least one sample obtained from a mammal for the presence or absence of an aberrant prion protein, the method comprising:
using said at least one sample to prepare a test set and a control set;
denaturing protein in said test set with guanidine thiocyanate or one or more chaotropic agents so as to enhance antibody reactivity towards aberrant protein, while antibody reactivity towards a normal form of the protein is reduced or unchanged;
leaving said control set untreated with guanidine thiocyanate or one or more chaotropic agents;
incubating said test set and said control set with anti-PrP^{sc} antibodies;
probing said test set and said control set for the presence or absence of an aberrant prion protein;
determining with said antibodies instances of increased antibody reactivity as a function of denaturation in guanidine thiocyanate or one or more chaotropic agents in the test set versus the control set; and
immunologically detecting said aberrant prion protein in an enzyme-linked immunoassay, wherein said enzyme-linked immunoassay comprises a dot-blot assay.

17-19. (Canceled).

20. (Previously Presented) A method of testing at least one sample obtained from a mammal for the presence or absence of an aberrant prion protein, the method comprising:
preparing said at least one sample as a tissue homogenate and dividing said at least one sample into two aliquots;
adding protease inhibitors to one first aliquot, and digesting one second aliquot with a protease, followed by the addition of protease inhibitors, so as to compare results before and after proteolysis;
spotting each said aliquot onto a solid phase to prepare a test set and a control set;
denaturing peptides contained within said test set with guanidine thiocyanate or one or more chaotropic agents so as to enhance antibody reactivity towards aberrant PrP protein, while antibody reactivity towards normal PrP protein is reduced or unchanged;

leaving said control set untreated with guanidine thiocyanate;

probing said test set and said control set for PrP protein by immunologically detecting PrP protein by way of an immunoassay with at least one antibody directed against a proteinase K resistant part of the PrP protein; and

comparing said test set to said control set wherein an increase in antibody reactivity among the test set after denaturation in guanidine thiocyanate relative to the control set is objective proof of the presence of PrP^{sc}.

21. (Currently Amended) A method for increasing the reliability of a test when testing at least one sample obtained from a mammal for the presence or absence of an aberrant prion protein, the method comprising:

using said at least one sample to prepare a test set and a control set;

denaturing the protein in said test set with guanidine thiocyanate or one or more chaotropic agents so as to enhance antibody reactivity towards aberrant protein, while antibody reactivity towards a normal form of the protein is reduced or unchanged;

leaving said control set untreated with guanidine thiocyanate or one or more chaotropic agents;

probing said test set and said control set with anti-PrP^{sc} antibodies raised against an epitope from an aberrant prion protein for the presence or absence of an said aberrant prion protein, wherein said epitope has a sequence selected from the group consisting of SEQ ID NOS:7-30; and

~~comparing the result of said test set and said control set~~determining with said anti-PrP^{sc} antibodies instances of increased antibody reactivity as a function of denaturation in guanidine thiocyanate or one or more chaotropic agents in the test set versus the control set.